ABSTRACT

A COS treatment apparatus for a gasified gas includes an O₂ removal catalyst and a COS conversion catalyst located on the downstream side of a gasified gas flow with respect to the O₂ removal catalyst. Also, a COS treatment apparatus includes a TiO₂ catalyst that carries Cr₂O₃ or NiO. Further, a COS treatment method includes a first step in which O₂ is removed by the reaction with H₂S and CO, and a second step in which COS is converted to H₂S.